KAIZEN® Institute

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The three KAIZEN Books

Gemba KAIZEN
How to do KAIZEN

KAIZEN
What is KAIZEN spirit?

KAIZEN FSL
KAIZEN as strategy

KAIZEN® (Original Definition)

改善

KAI — Change

ZEN — Good (for the better)

KAIZEN® = Continual Improvement

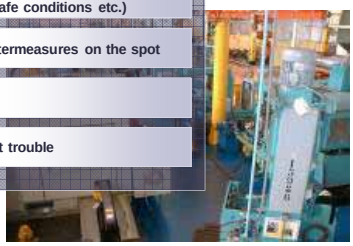
KAIZEN® (new Definition)

- Everyday improvement
- Everybody improvement
- Everywhere improvement
- From small incremental improvement to dramatic strategic improvement

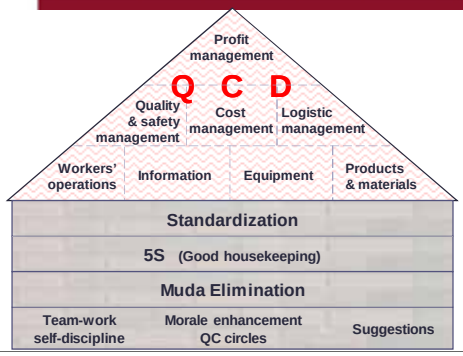
Organisation for KAIZEN®

The 5 Gemba Principles

1. When an abnormality occurs, go to Gemba first
2. Check with Gembutsu (machine, material, failures, rejects, unsafe conditions etc.)
3. Take temporary countermeasures on the spot
4. Remove root cause
5. Standardize to prevent trouble



House of Gemba Management



7 Types of Muda

1. Muda of over-production
2. Muda of waiting
3. Muda of transport
4. Muda of processing
5. Muda of inventory
6. Muda of motion
7. Muda of repair/rejects

Gemba Deteriorates

Everything in Gemba deteriorates if left alone.

That is the reason why Gemba needs to be sustained and improved.

Disneyland

Behavioral standards

Make Eye contact and Smile
Greet and welcome Each and Every Guests
Seek out Guest Contact
Provide Immediate Service Recovery
Display appropriate Body Language
Preserve the "Magical" Guest Experience
Thank Each and Every Guest

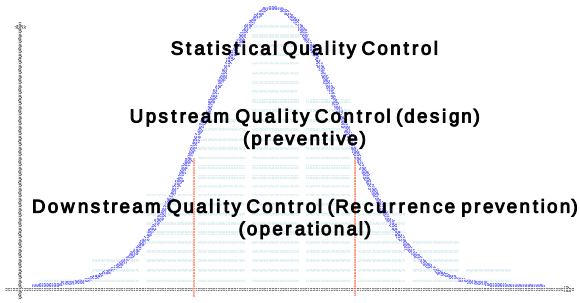
Commitment to Quality

Don’t get,

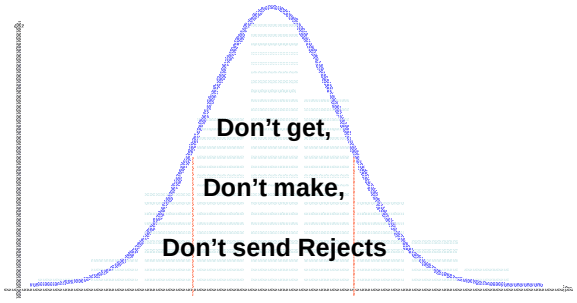
Don’t make

Don’t send Rejects

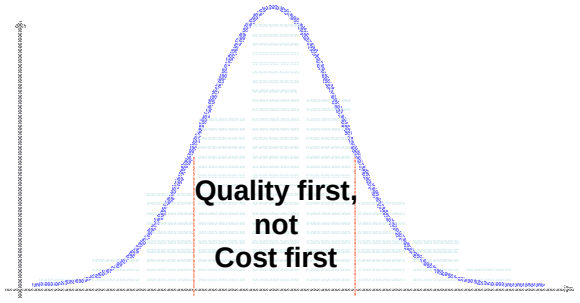
Three Quality Controls



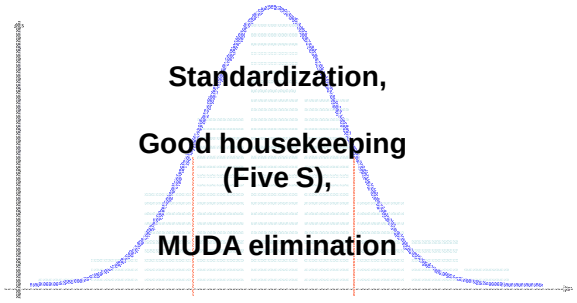
Built Quality in the Process



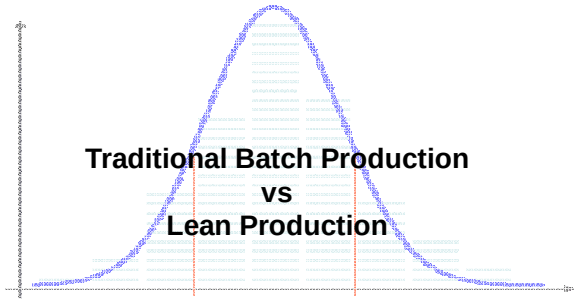
Quality, Cost, Delivery



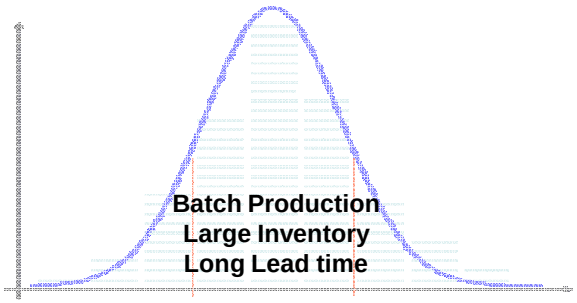
GEMBA Management



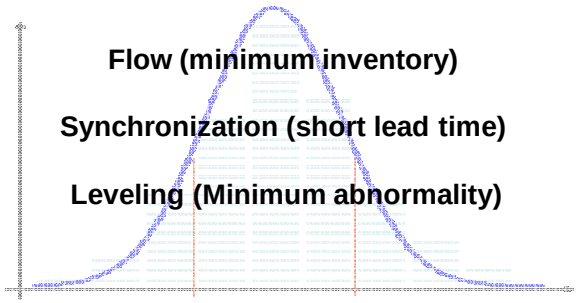
Two Production Systems



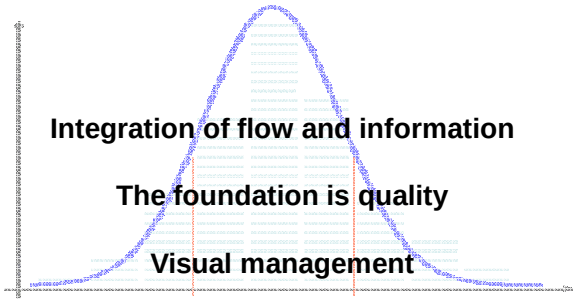
Features of Traditional Production



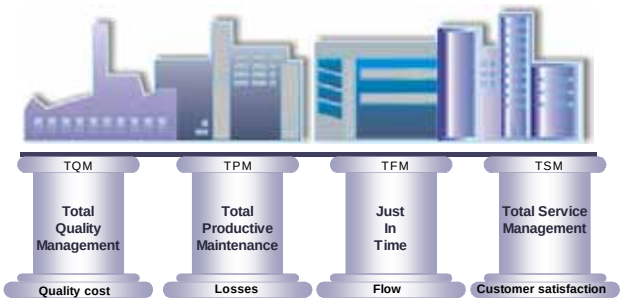
Features of Lean Production (1)



Features of Lean Production (2)



4 Pillars of World Class Management



KAIZEN® Road Map to world class (1)

Batch Production vs. JIT Production (1)

Batch	JIT
No takt time	Work to takt time
Large inventory	Small inventory (eventually one-piece)
Isolated islands	Flow production
Push scheduling	Pull scheduling
No-standard inventory	Standard inventory
Larger, faster and special equipment	Even paced equipment (Takt time synchronised)

Batch Production vs. JIT Production (2)

Batch	JIT
Less frequent set-up changes	More frequent set-up changes
One person per machine	One person for many machines
Single skill operator	Multiple skill operator
Sitting work	Standing and walking work
Advance production allowed	Advance production not allowed
Quality control grouping, Sampling inspection	All number inspection

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The Toyota Way 1

- The learning organization
- Respect for people
- Education & training
- Challenging spirit
- Challenging management (Oh, NO! - System)
- KAIZEN, Toyota's DNA

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The Toyota Way 2

- Team work
- Quality First
- Long term perspective
- Genchi (Gemba) Gembutsu
- Do it right away
- Muda elimination

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Advantages of shortening the flow

- Improve quality
- Shorten lead time and realize prompt delivery
- Reduce inventory and stagnation
- Use minimum resources
- Simplify management (Less managerial and administrative intervention)
- Realize minimum cost and maximum profit

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When the Flow is shortened

- Quality automatically improves
- Delivery automatically improves
- Cost automatically goes down

and brings

- Big Profit!

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Conditions for minimizing the flow

- Standardization
- 5S
- Visual Management
- MUDA Elimination
- Reorganizing Management Structure
- Building KAIZEN® Culture

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3 Conditions to Create a Pull System

Flow

Synchronization

Leveling

Who manages the Flow?

…Let the flow manage the processes, and not let management manage the flow.

(Taiichi Ohno)

GOVERNANCE – Assessment (1)

B/S & PL STATEMENT	Financial status
Deming prize	Quality
PM prize	Quality & equipment
EFQM Excellence Model	Quality
Baldrige prize	Quality
Balanced scorecards	Financial Customers Business process Learning

GOVERNANCE – Setting the goals (2)

Quantitative or qualitative?

Long range or short range?

Is dead line specified

GOVERNANCE – Three corporate functions (3)

DESIGNING

MAKING

SELLING

Two production systems (4)

TRADITIONAL (BATCH) SYSTEM

LEAN (JUST-IN-TIME) SYSTEM

Lean Production System (5)

FLOW

SYNCHRONIZATION

LEVELING

BUILDS FLEXIBILITY TO MEET CHANGING ENVIRONMENTS

Taiichi Ohno (1912 - 1990)

1945-1947 Ohno's initial efforts;
From multiple machine handling to multiple process handling.
Reduced the number of workers on the transmission line from 15 to 2.
Standard work was introduced.

1945 End of the Second World War
Kiichiro declares to catch up with the US in 3 years.
Ohno, head of machining department vowed to realize Kiichiro*s orders

1945 1950 1954 1962 1971 1974

Taiichi Ohno (1912 - 1990)

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1974 Jishuken (TPS study Group) was started involving Toyota suppliers
1973 The first oil crises happened
1971 Succeeded to change the die in 3 minutes for 500 and 1,000 ton presses

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